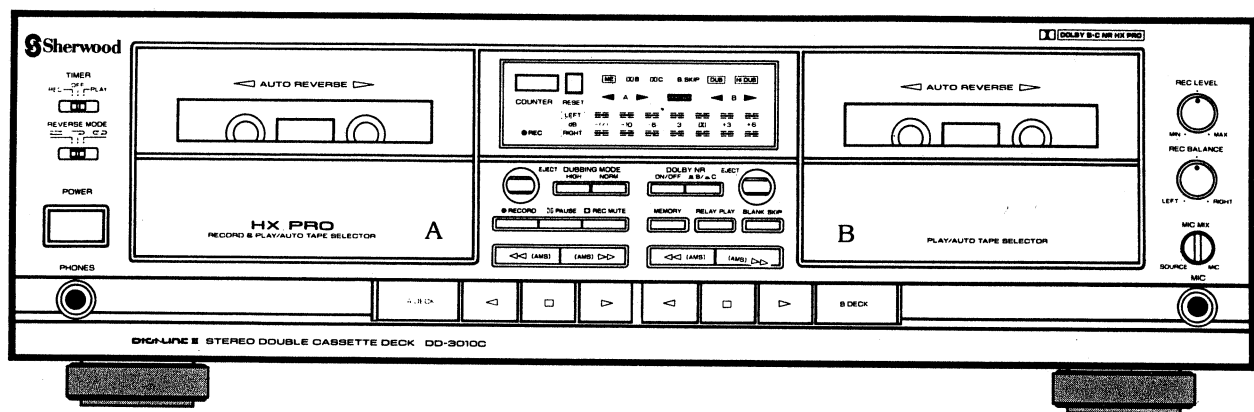


SERVICE MANUAL

DD-3010C

STEREO DOUBLE CASSETTE DECK



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Exploded View

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 **Sherwood**

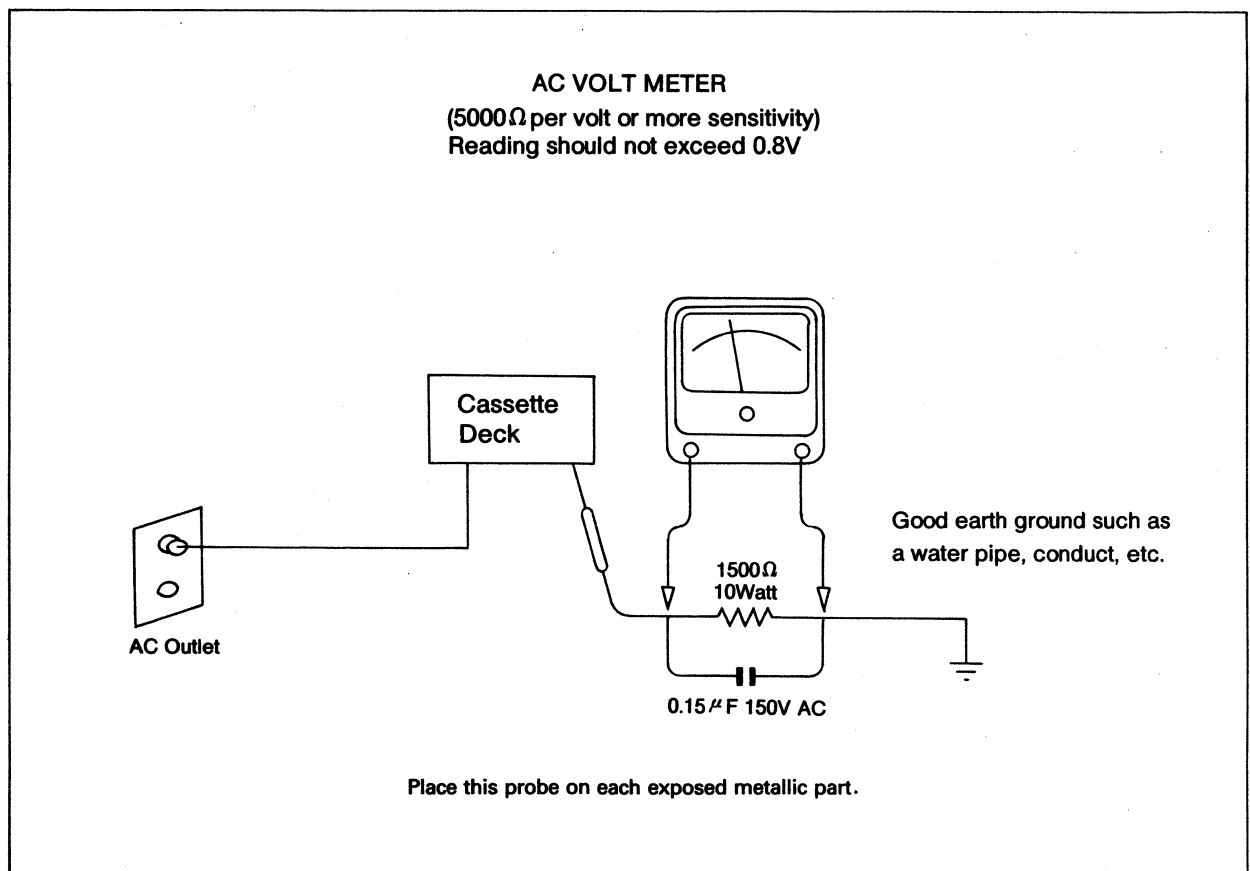
Safety Precaution

WARNING

Service should not be attempted by anyone unfamiliar with the necessary precautions on this player. The following precautions are necessary during servicing.

1. Many electrical and mechanical parts in this player have special characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristic are identified in this manual and its supplements: electrical components having such features are identified by a Δ in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire or other hazards.
2. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as

terminals, screwheads, metal overlays, etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (120V Version only). (Do not use a line isolation transformer during this check.) Use an AC voltmeter having 5000 Ω per volt or more sensitivity in the following manner: Connect a 1500 Ω 10watt resistor paralleled by a 0.15 μ F 150V AC capacitor, between a known good earth ground (water pipe, conduct, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 Ω resistor and 0.15 μ F capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.3 volts RMS. This corresponds to 0.2mA AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



Specifications

Track Configuration

The 4-track, 2-channel and rotary reverse heads & Stereo Cassette Deck motors.

1 - Electronic Governor

1 - High Torque DC Motor(Reel)

Mechanism

1 - Motor, 1 - Solenoid Mechanism

Heads

Rec / Playback Head Hard Permalloy

Erase Head Double Gap Ferrite

Tape Speed 1 and 7 / 8 IPS(4.76cm / sec) $\pm 1.0 / \pm 1.0\%$
(FWD/REV)

Wow Flutter(WRMS) No More than 0.13%

Fast Winding Time(C - 60) About 120sec

Input Sensitivity Impedance

MIC 0.5mV / 4.7k ohms

Line 100mV / 47k ohms

Output Level / Impedance

Line 500mV / 1.2k ohms

Signal to Noise Ratio(W.CCIR / ARM)

CrO2 Tape with Dolby B / C NR More than 64 / 75dB

CrO2 Tape without Dolby NR More than 55dB

Frequency Response(- 20dB REC Dolby NR off)

Normal Tape 20Hz - 17,500kHz, ± 3 dB

CrO2 Tape 20Hz - 17,500kHz, ± 3 dB

Metal Tape 20Hz - 17,500kHz, ± 3 dB

THD(1kHz, 0dB Rec) No More than 1.0%

Channel Separation More than 40dB

Power Consumption 18W

Power Requirements ;

A : 120V 60Hz for American / Canadian Version

B : 120 / 220V, 60 / 50Hz for Multi - voltage Version(switchable)

C : 230V 50Hz for General European Version

D : 230V 50Hz for German / Italian Version

E : 240V 50Hz for U.K / Australian Version

F : 230V 50Hz for Swiss / Scandinavian Version

KLE : 220V 50Hz for Tailand

Dimensions 440(W)X125(H)X245(D)mm

17.3(W)X4.9(H)X9.6(D)inch

Weight(Net) 5.2kg(11 lbs, 7.4 oz)

Note : Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the European standard, and provides information on regional circuit modification through use of alternate schematic diagram, and information on regional component variations though use of parts list. Design and Specifications subject to change without notice for improvement.

RIGHT CHANNEL IS SAME AS LEFT CHANNEL

LINE IN RIGHT

LINE IN LEFT CH

MIC JACK

MIC OFF

MIC AMP

REC VOLUME

BALANCE

TO R-CH

IC801

IC502

IC503

IC504

IC505

IC506

IC507

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Alignment Procedures

Before Measurements and Adjustment

The following general conditions apply to the electrical measurements and adjustments unless especially stated otherwise.

- Dolby NR switch off.
- Volume control : Recording level VR901 max.
- Use 500mV(200mwb / m) for 0dB as the standard level of the unit.

Test tape

- TCC - 155 ——— Azimuth(14kHz, - 24dB)
- TCC - 112 ——— Tape speed(3kHz, - 10dB)
- TCC - 130 ——— Playback level (Dolby NR ref. tape 400Hz, 0dB)
- TCC - 185C ——— Playback frequency response

— Reference Tape

- Normal ——— TDK AC - 224
- CrO₂ ——— TDK AC - 513
- Metal ——— TDK AC - 712

2. Instrument required

- Audio frequency oscillator
- ACVM or dual channel, mV - meter
- Wow / Flutter meter
- Oscilloscope

Playback section

Adjustment	Test tape	Mode	Apply signal to	Measure on	Read on	Adjust with	Adjust to
Head Azimuth	TCC - 155 14kHz (A.BEX)	FWD Play (A & B Deck)		Line output	ACmV - meter Oscilloscope	Adjusting a left screw of head	Max ● Lissajous' figure become a straight line with an angle 45 degrees
		REV play (A & B Deck)				Adjusting a right screw of head	
Playback Speed at normal	TCC - 112 3kHz — 10dB(A.BEX)	Play (A & B Deck)			Wow and Flutter Meter	A Deck VR201 & B Deck VR203	3000Hz ± 30Hz
Playback Speed at Hi - speed	TCC - 112 3kHz — 10dB(A.BEX)				ACmV - meter	A Deck VR202 & B Deck VR204	4500Hz ± 45Hz
Playback Level	TCC - 130 400Hz 0dB (A.BEX)					A Deck VR502L / R	500mV
					B Deck VR510L / R		
Playback frequency response	TCC—185C 12.5kHz,1kHz, 60Hz(A.BEX)				ACmV—meter		See graph Fig. 3 freq. response

Recording section

Adjustments	Test tape	Mode	Apply signal to	Measure on	Read on	Adjust with	Adjust to
Bias OSC Frequency	AC - 712 (TDK)	Rec / Pause		White color of CNT302	Frequency Counter	L305	105kHz ± 400Hz
105kHz trap suppression	AC - 712 (TDK)			TP2L / R	ACmV - meter Oscilloscope	L301L / R	Minimize the reading on ACVM

Adjustments	Test tape	Mode	Apply signal to	Measure on	Read on	Adjust with	Adjust to
Target value Bias	Metal AC - 712			TP1L / R		VR301L / R	AC40V
	CrO2, AC-513					VR303	AC20V
	Normal, AC - 224					VR302	AC10V
Recording Level	AC - 712 (TDK)	Rec / Pause	400Hz to Line	Line out		VR701L / R	About 18mV *c
Bias	AC - 712 AC - 513 AC - 224 (TDK)		400Hz to Line	Line out	ACmV - meter	See Target Value Bias	If it necessary repeat bias adjustment
	4kHz - 6.3kHz 10kHz - 12kHz 14kHz - 16kHz to Line in				Recording number of Frequency with the same input voltage and play them back.		
19kHz suppression	Arbitrary Tape	Rec / Pause	400Hz to Line in	Line input	ACmV - meter	LF Generator	100mV
				Line output	ACmV - meter Oscilloscope	L701L / R	Minimize the reading on ACVM

Note :

- *a. Prior to any measurement or adjustment with the tape running, heads and tape guides should be degaussed and cleand. Referenc below the figure.
- *b. The maximum permissibie speed variation $\pm 1.0\%$. Moreover the Wow and Flutter can be read. This value should not be exceed 0.2%.
- *c. The voltage on Line out should be $500\text{mV} \pm 20\text{mV}$. If not, it reduces the LF signal(bias disabled) as many as the reading was too low or too high by VR502L / R and VR 501L / R.
- *d. When the channel is adjusted, this may slightly affect the adjustment of the other channel. If the adjustment is correct, the frequency response curve will be similar to curve b in figure 4, distortion below 3%.

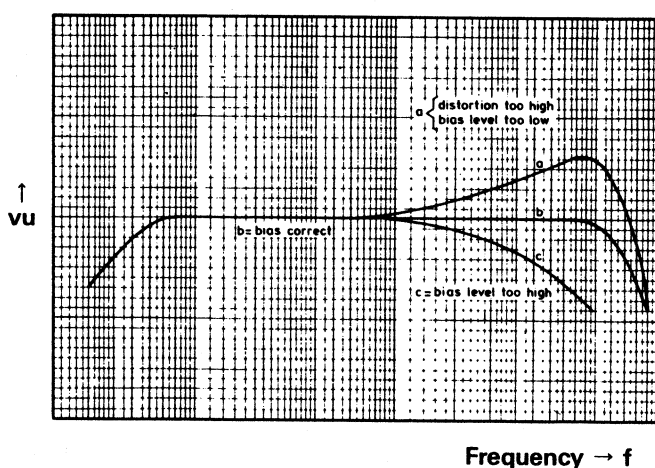


Fig. 2

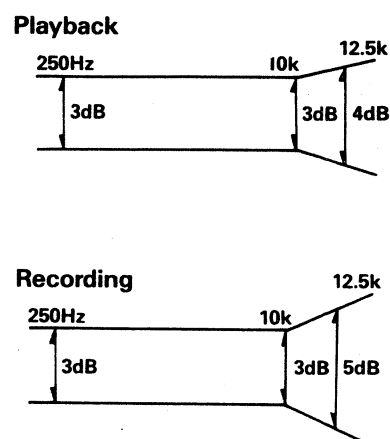
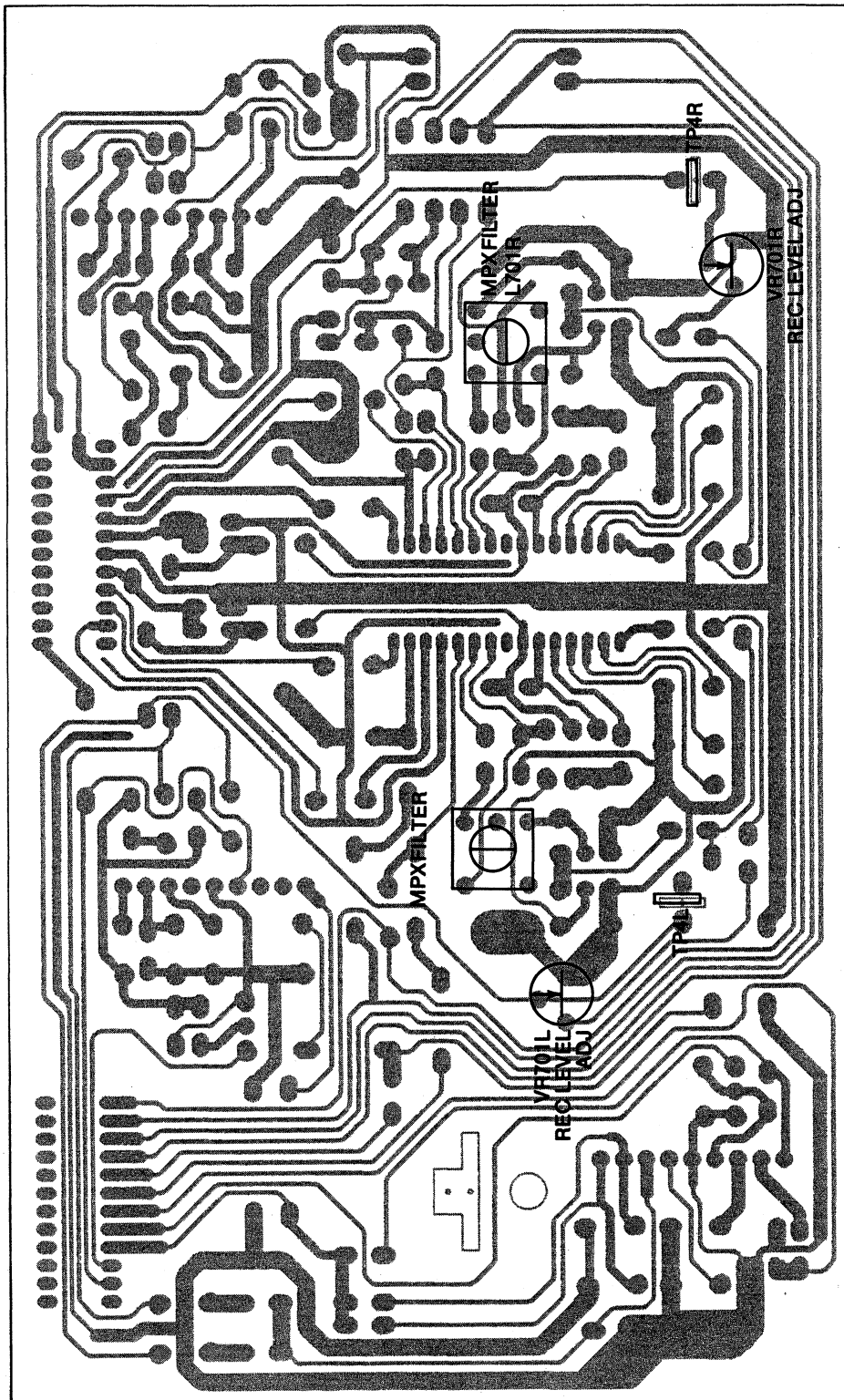


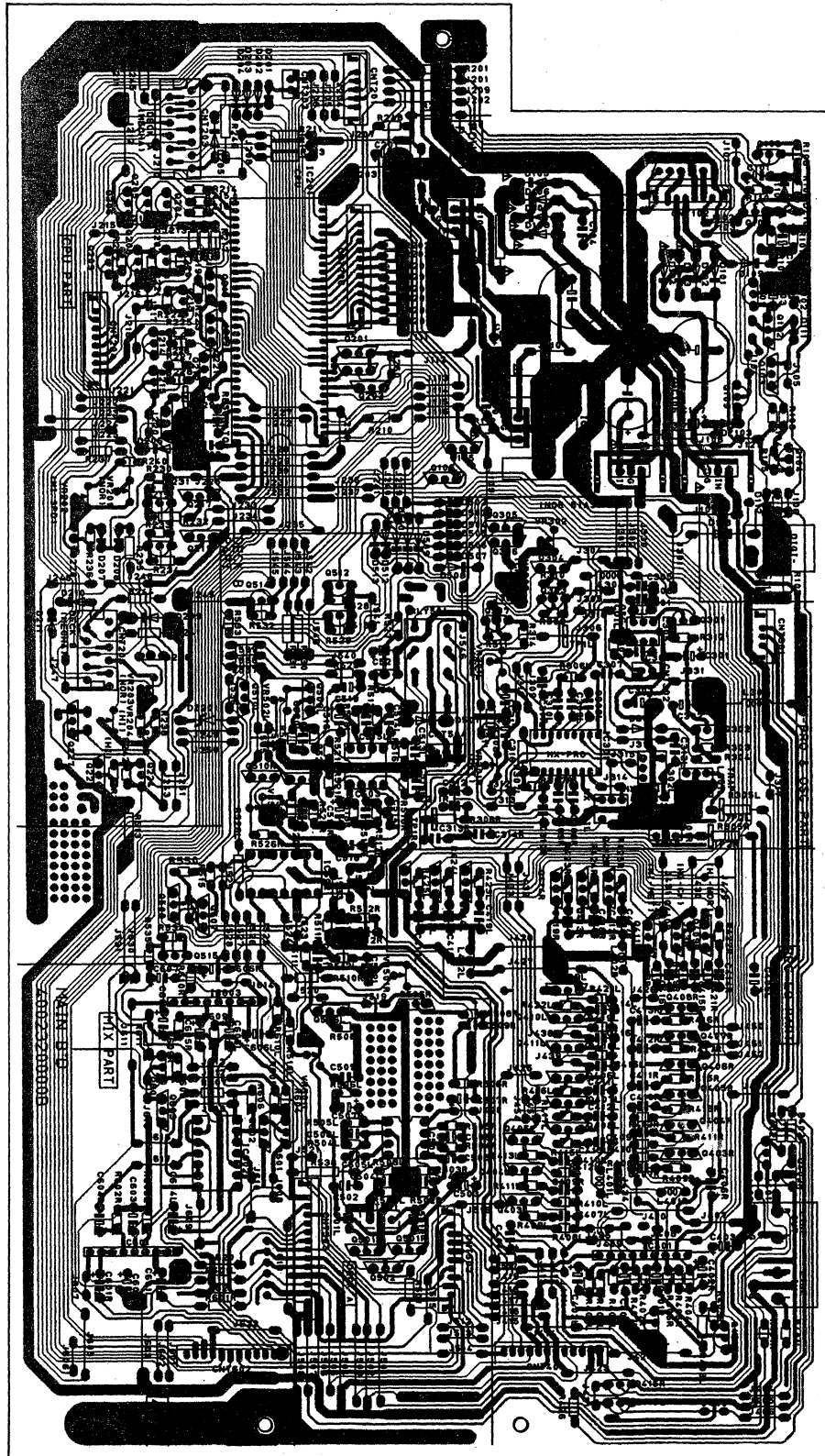
Fig. 1 Allowable Playback/Recording Frequency Response Zone

**Adjustment Point
(DOLBY P.C. BOARD)**

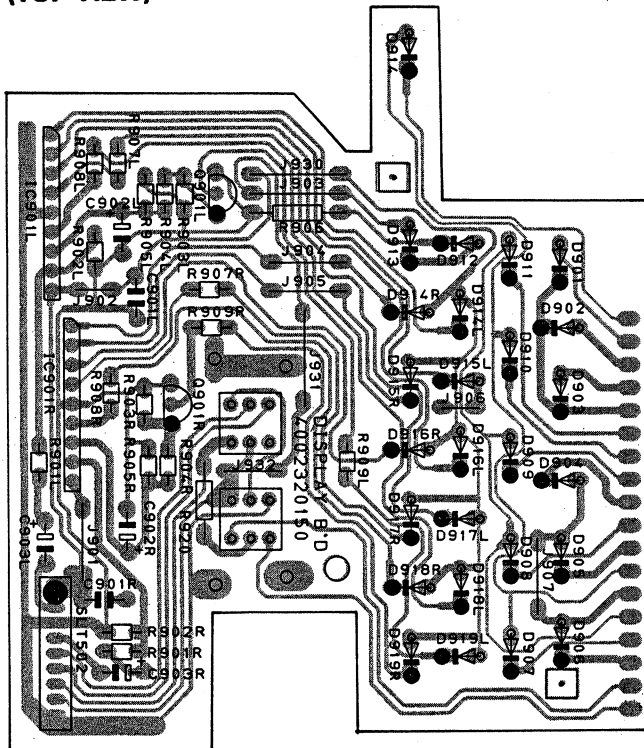


P.C. Boards (Top & Bottom Views)

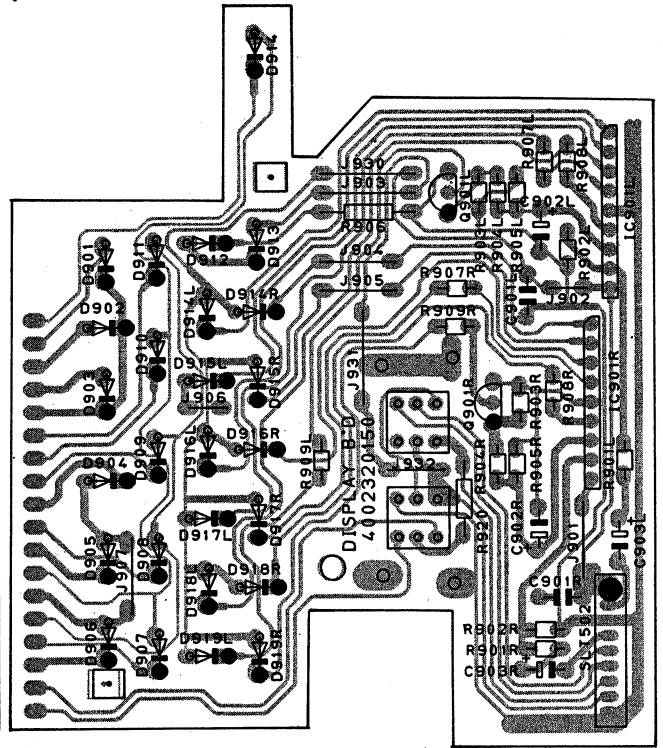
MAIN P.C BOARD (TOP VIEW)



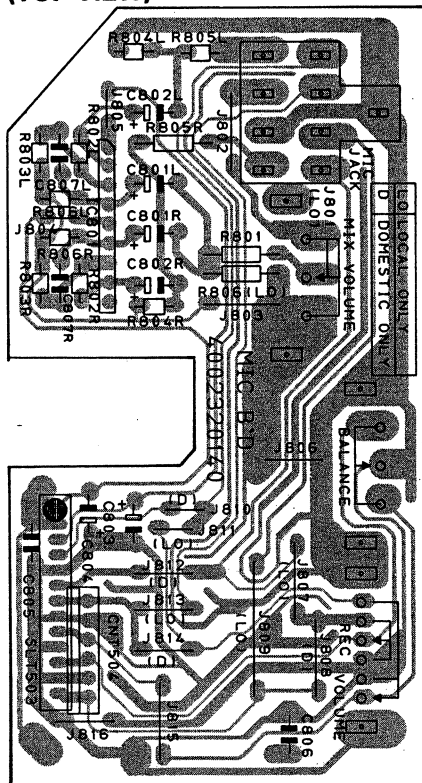
**DISPLAY P.C. BOARD
(TOP VIEW)**



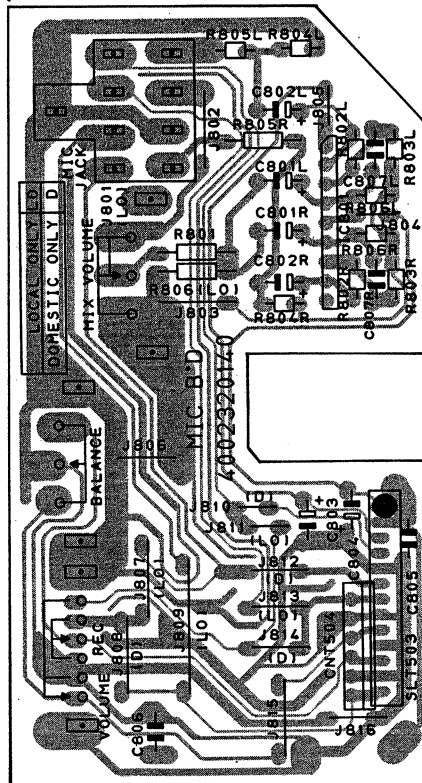
(BOTTOM VIEW)



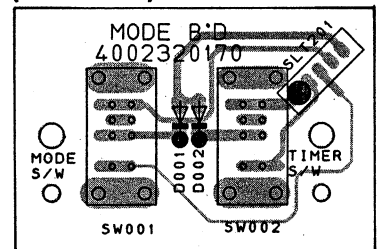
**MIC P.C. BOARD
(TOP VIEW)**



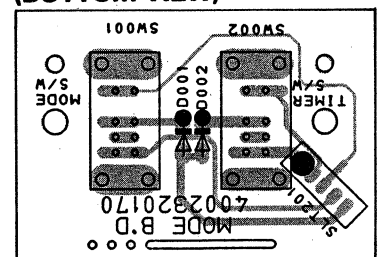
(BOTTOM VIEW)



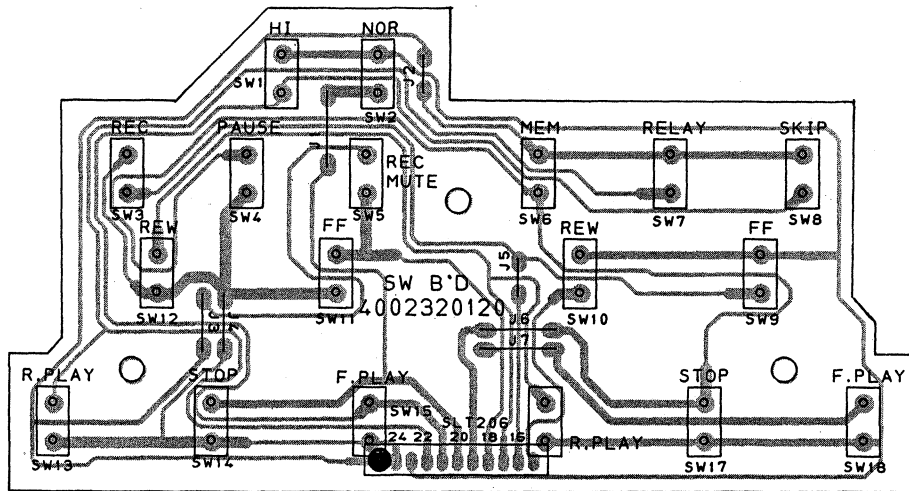
**MODE P.C. BOARD
(TOP VIEW)**



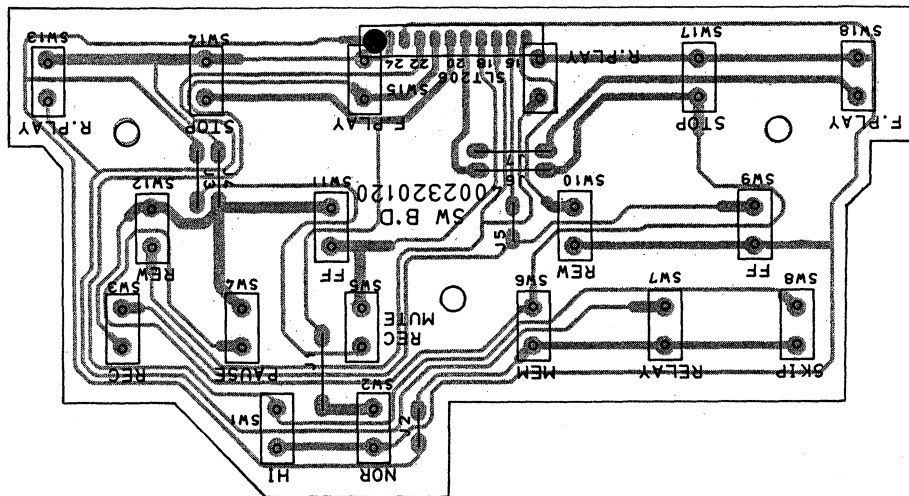
(BOTTOM VIEW)



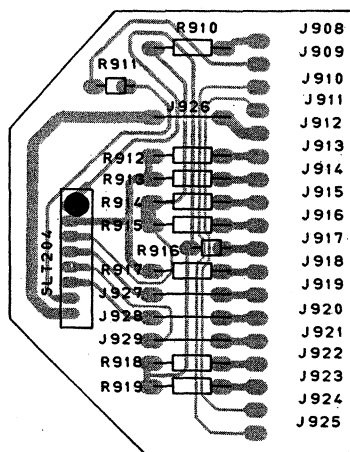
**SW P.C. BOARD
(TOP VIEW)**



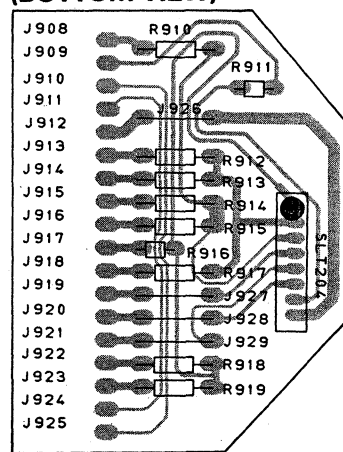
(BOTTOM VIEW)



**DISPLAY P.C. BOARD
(TOP VIEW)**

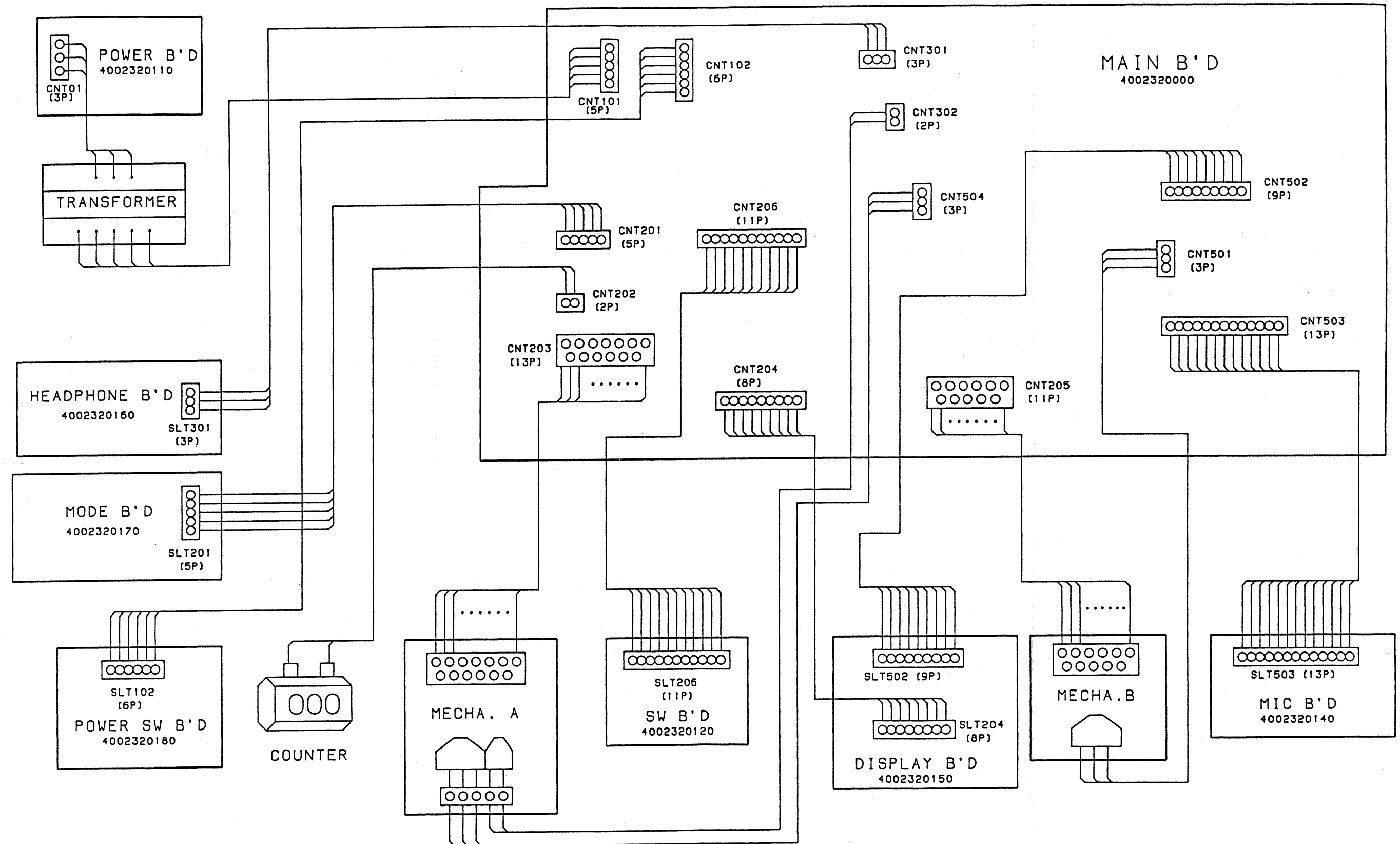


(BOTTOM VIEW)



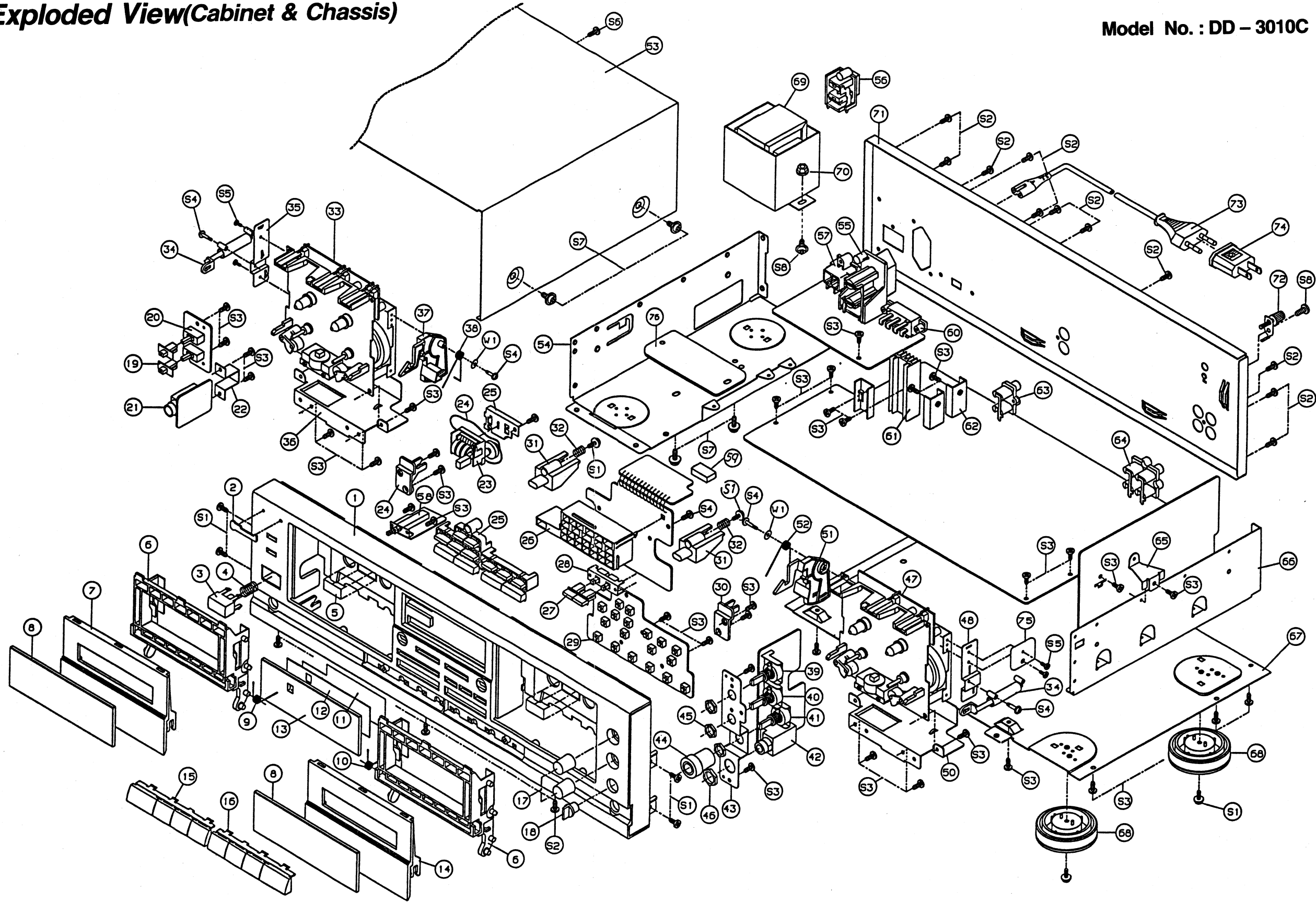
Wiring Diagram

Model No. : DD - 3010C



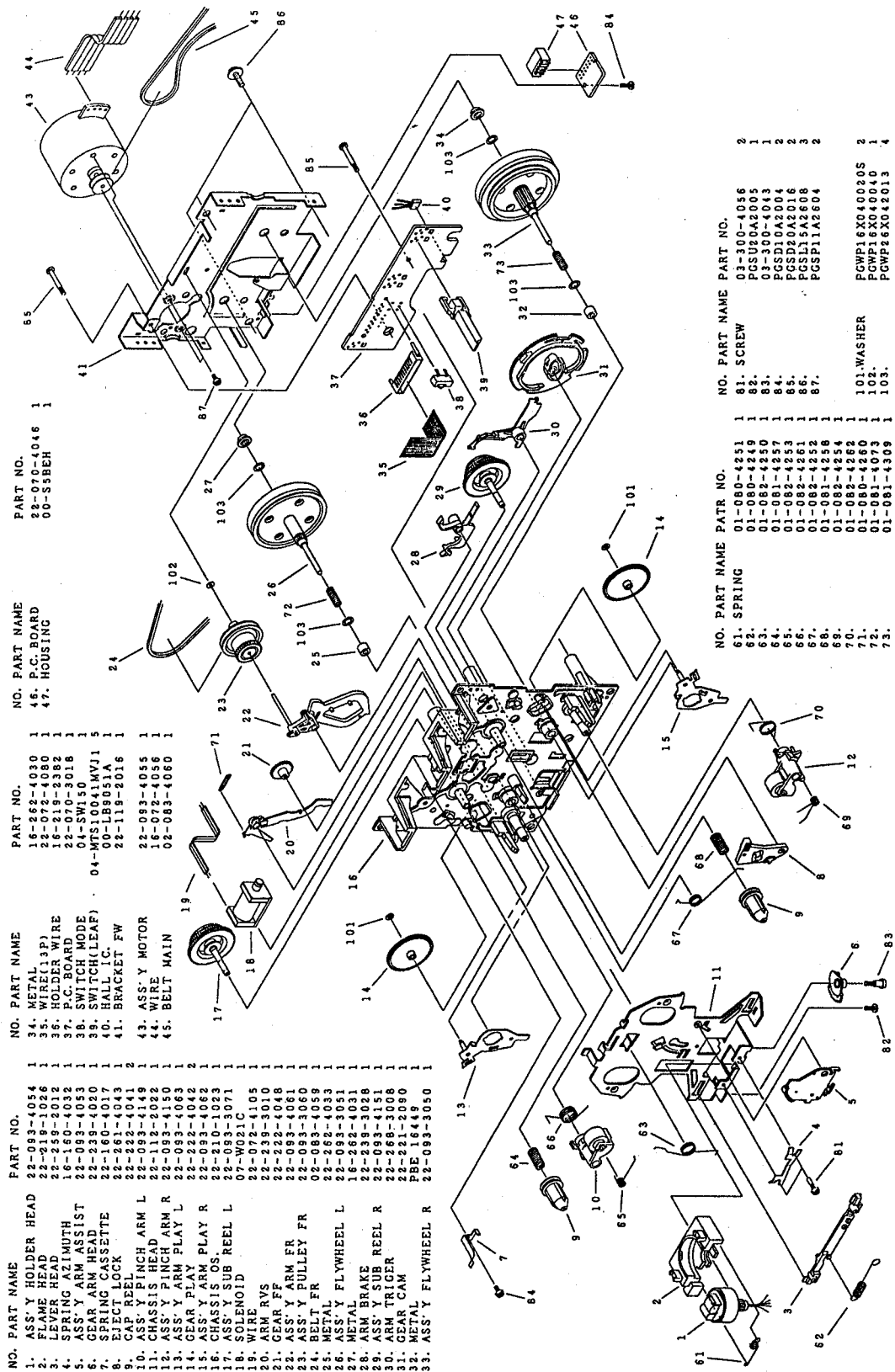
Exploded View(Cabinet & Chassis)

Model No. : DD – 3010C

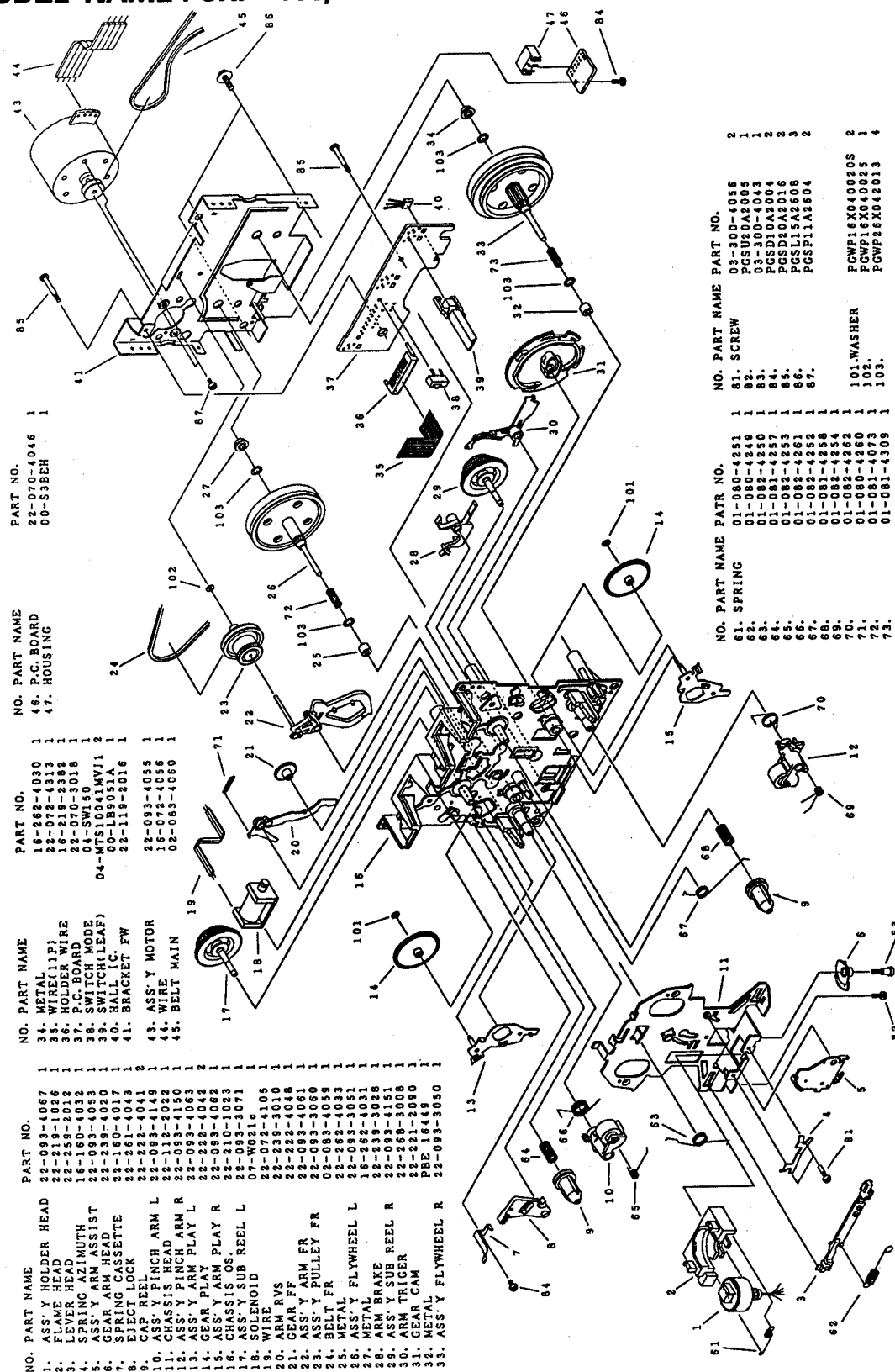


Exploded View(I) (Deck Mechanism Ass'y)

(MODEL NAME : CRF-410)



(MODEL NAME : CRF-411)



Electrical Parts List

PRODUCT SAFETY NOTICE : If you replace any of these components, carefully read the product safety notice of this manual. Don't degrade the safety of the product through improper servicing. Remark meaning for version, so refer to power requirement of Specifications in this manual. Resistors & Capacitors tolerance ; D($\pm 0.5\%$), J($\pm 5\%$), K($\pm 10\%$), M($\pm 20\%$), Z($+80\%$, -20%)

Ref.No	Part No.	Description	Remark
Main P.C. Board			
Capacitors			
C101	3479222971	Electric SA 2.2uF 50V M	
C102/C103	3479247971	Electric SA 4.7uF 50V M	
C104	3679473120	Mylar 0.047uF 50V J	
C105	3409333249	Electric SG 3300uF 25V M	
C106/C108	3409322249	Electric SG 2200uF 25V M	
C107	3479322121	Electric SG 220uF 10V M	
C109	3479347121	Electric SG 470uF 10V M	
C110/C111	3519104935	Ceramic 0.1uF 50V K	
C112	3579102130	Ceramic 0.001uF 50V K	
C201	3479322071	Electric SG 22uF 50V M	
C202	3519104935	Ceramic 0.1uF 50V K	
C301/C303	3479310121	Electric SG 100uF 10V M	
C302	3479333061	Electric SG 33uF 35V M	
C304	3679123120	Mylar 0.012uF 100V J	
C305	3679153120	Mylar 0.015uF 100V J	
C306	3679472120	Mylar 0.0047uF 100V J	
C307	3579100130	Ceramic 10pF 50V D	
C308L/R	3679273120	Mylar 0.027uF 100V J	
C309L/R	3679223120	Mylar 0.022uF 100V J	
C310L/R	3679103120	Mylar 0.01uF 100V J	
C311L/R	3579561130	Ceramic 560pF 50V J	
C312	3679473120	Mylar 0.047uF 100V J	
C313L/R	3579331130	Ceramic 330pF 50V J	
C315L/R	.	Not used !	
C314L/R	3579471120	Ceramic 470pF 50V J	
C316/C317	3479333061	Electric SG 33uF 35V M	
C401L/R	3479247971	Electric SA 4.7uF 50V M	
C402L/R	3479222871	Electric SA 0.22uF 50V M	
C403/C404	3479347161	Electric SG 33uF 35V M	
C406L/R	3479210971	Electric SA 1uF 50V M	
C407L/R	3679333120	Mylar 0.033uF 100V J	
C408L/R	.	Not used !	
C409L/R	3679472120	Mylar 0.0047uF 100V J	
C410L/R	3679183120	Mylar 0.018uF 100V J	
C411L/R	3679153120	Mylar 0.015uF 100V J	
C412L/R	3679183120	Mylar 0.018uF 100V J	
C413L/R	3679153120	Mylar 0.015uF 100V J	
C414L/R	.	Not used !	
C415L/R	3679223120	Mylar 0.022uF 100V J	
C416L/R	3679333120	Mylar 0.033uF 100V J	
C417L/R	3679273120	Mylar 0.027uF 100V J	
C418L/R	3679273120	Mylar 0.027uF 100V J	
C419L/R	3679183120	Mylar 0.018uF 100V J	
C501L/R	3579331130	Ceramic 330pF 50V J	
C502/C503	3479330161	Electric SA 33uF 35V M	
C504L/R	3579471130	Ceramic 470pF 50V J	
C505L/R	3579101130	Ceramic 100pF 50V J	
C506L/R	3679223120	Mylar 0.022uF 100V J	
C507L/R	3479247971	Electric SA 4.7uF 50V M	
C508/C510	.	Not used !	
C509L/R	3679183120	Mylar 0.018uF 100V J	
C511L/R	3579331130	Ceramic 330pF 50V J	
C512L/R	3579221130	Ceramic 220pF 50V J	

Ref.No	Part No.	Description	Remark
C513L/R	3579821130	Ceramic 820pF 50V J	
C514L/R	3579101130	Ceramic 100pF 50V J	
C515L/R	3679223120	Mylar 0.022uF 100V J	
C516L/R	3479247971	Electric SA 4.7uF 50V M	
C517L/R	.	Not used !	
C518/C519	3479333061	Electric SG 33uF 35V M	
C520L/R	3679183120	Mylar 0.018uF 100V J	
C521	3479347041	Electric SG 47uF 25V M	
C601L/R	3479247971	Electric SA 4.7uF 50V M	
C602/C603	3479333061	Electric SG 33uF 35V M	
C604L/R-C606L/R	3479247971	Electric SA 4.7uF 50V M	
C607/C608	3479333061	Electric SG 33uF 35V M	
Connectors			
CNT101	4428506910	Plug 5P	
CNT102	4428505810	Plug 6P	
CNT201	4428531320	Wire Trap 5P	
CNT202	4428517510	Plug 2P	
CNT203	4428524340	Wire Trap 13P	
CNT204	4428531620	Wire Trap 8P	
CNT205	4428525320	Wire Trap 11P	
CNT206	4428531920	Wire Trap 11P	
CNT301	4428531120	Wire Trap 3P	
CNT302	4428517510	Plug 2P	
CNT401	4428550120	Board to Board Plug 12P	
CNT501	4428526870	Plug 3P	
CNT502	4428531720	Wire Trap 9P	
CNT503	4428532120	Wire Trap 13P	
CNT504	4428517610	Plug 3P	
CNT602	4428550120	Board to Board Plug 12P	
Coils			
L301L/R	2658501080	Rec Trap,105kHz	
L302L/R	2638601240	HX-PRO, Coil	
L303/L304	2648610284	Inductor, 1mH	
L305	2638601150	OSC Coil	
L401L/R	648601220	Inductor, 6.3mH	
L402L/R	2648601040	Inductor, 2mH	
Diodes			
D101 - D108	2058106100	1N4002	
D109 - D113	2058322101	1N4148M	
D201 - D208	2058322101	1N4148M	
D209	2058322101	1N4148M	
D210 - D211	2058322101	1N4148M	
D301/D501	2058322101	1N4148M	
D502/D513	2058322101	1N4148M	

Ref.No	Part No.	Description	Remark
DZ101/DZ102	2258599103	Zener, UZ DZ5. 1BSB	
DZ103	2258599100	Zener, DZ3. 3BSA	
DZ201	2258599107	Zener, DZ9. 1BSC	
IC's			
IC101	2168606103	KIA7805, Regulator	
IC102	2168606104	KIA7812, Regulator	
IC103	2168602101	MC7808, Regulator	
IC104	2168602102	MC7908, Regulator	
IC201	2138322132	DWP913, CPU	
IC301	2168013111	uPC1297CA, HX - PRO	
IC401	2168206103	KIA4559, Rec EQ	
IC501	2168020106	NJM2068DD, B Deck PB	
IC502	2138001101	GD4066B, A/B Deck PB Switching	
IC503	2168020106	NJM2068DD, A Deck PB	
IC601	2168206103	KIA4559, Buffer	Dom.
IC602	2168010101	GD4066B, MIC MIX Switching	Dom.
IC603	2168206103	KIA4559, Buffer	Dom.
Resistors			
R101	3069562970	5.6k Ω	
R102	3069202970	2k Ω	
R103	3069473970	47k Ω	
R104	3069103970	10k Ω	
R105	3069302970	3k Ω	
R106	3069223970	22k Ω	
R107	3069224970	220k Ω	
R108	3069102970	1k Ω	
R109	3069103970	10k Ω	
R110	3069202970	2k Ω	
R111	3039100572	C., 10 Ω 2W	
R112	3069109970	1 Ω	
R113	3069202970	2k Ω	
R201	3069103970	10k Ω	
R202 - R209	3069473970	47k Ω	
R210 - R213	3069103970	10k Ω	
R214 - R216	3069102970	1k Ω	
R217 - R219	3069302970	3k Ω	
R220 - R222	3069473970	47k Ω	
R223	3069302970	3k Ω	
R224 - R225	3069473970	47k Ω	
R226	3069751970	750 Ω	
R227	3069473970	47k Ω	
R228	3069751970	750 Ω	
R229	3069102970	1k Ω	
R230	3069472970	4.7k Ω	
R231	3069473970	47k Ω	
R232	3069751970	750 Ω	
R233	3069473970	47k Ω	
R234	3069751970	750 Ω	
R235/R236	3069473970	47k Ω	
R237/R238	3069432970	4.3k Ω	
R239/R240	3069302970	3k Ω	
R241	3069183970	18k Ω	
R242	3069473970	47k Ω	
R243	3069302970	3k Ω	
R244	.	Not used !	
R245	3069103970	10k Ω	

Ref.No	Part No.	Description	Remark
R246	3069183970	18k Ω	
R247	3069102970	1k Ω	
R248	3069103970	10k Ω	
R301	3069393970	39k Ω	
R302	3069109970	1 Ω	
R303 - R305/L/R	3069562970	5.6k Ω	
R306/L/R	3069154970	150k Ω	
R307/L/R	3069333970	33k Ω	
R308	3069100970	10 Ω	
R309	3069473970	47k Ω	
R310	3069302970	3k Ω	
R311	3069102970	1k Ω	
R312	3069150970	15 Ω	
R313	3069562970	5.6k Ω	
R401L/R	3069273970	27k Ω	
R402L/R	3069302970	3k Ω	
R403L/R	3069302970	3k Ω	
R404L/R	3069564970	560k Ω	
R405L/R	3069682970	6.8k Ω	
R406L/R	3069332970	3.3k Ω	
R407L/R	3069473970	47k Ω	
R408L/R	3069822970	8.2k Ω	
R409L/R	3069822970	8.2k Ω	
R410L/R	3069243970	24k Ω	
R411L/R	3069243970	24k Ω	
R412L/R	3069512970	5.1k Ω	
R413L/R	3069362970	3.6k Ω	
R415L/R	3069221970	220 Ω	
R416L/R	3069221970	220 Ω	
R417L/R	3069181970	180 Ω	
R418L/R	3069302970	3k Ω	
R419L/R	3069622970	6.2k Ω	
R423L/R-R425L/R	3069560970	56 Ω	
R426	3069302970	3k Ω	
R501L/R	3069472970	4.7k Ω	
R502L/R	3069104970	100k Ω	
R503L/R	3069390970	39 Ω	
R504L/R	3069104970	100k Ω	
R505L/R	3069682970	6.8k Ω	
R506L/R	3069302970	3k Ω	
R508L/R	3069302970	3k Ω	
R510L/R	3069333970	33k Ω	
R511L/R	3069104970	100k Ω	
R513	3069103970	10k Ω	
R515	3069202970	2k Ω	
R516L/R	3069104970	100k Ω	
R517L/R	3069104970	100k Ω	
R518L/R	3069682970	6.8k Ω	
R521L/R	3069390970	39 Ω	
R523	3069330970	33 Ω	
R524L/R	3069302970	3k Ω	
R525L/R	3069302970	3k Ω	
R526L/R	3069333970	33k Ω	
R527	3069302970	3k Ω	
R528/R529	3069473970	47k Ω	
R530/R531	3069302970	3k Ω	
R532	3069473970	47k Ω	
R533	3069302970	3k Ω	
R534	3069473970	47k Ω	
R535	3069302970	3k Ω	

Ref.No	Part No.	Description	Remark
R536	3069202970	2k Ω	
R601L/R	3069753970	75k Ω	Dom.
R602L/R	3069104970	100k Ω	Dom.
R603	.	Not used!	
R604	3069302970	3k Ω	Dom.
R605	3069473970	47k Ω	Dom.
R606 - R607	3069202970	2k Ω	Dom.
R608	3069473970	47k Ω	Dom.
R609L/R	3069104970	100k Ω	Dom.
R610L/R	3069823970	82k Ω	Dom.
R611	3069302970	3k Ω	Dom.
Variable Resistor			
VR201 - VR204	3248020243	2k Ω (B)	
VR301L/R	3248010343	10k Ω (B)	
VR302/VR303	3248050243	5k Ω (B)	
VR501L/R	3248010343	10k Ω (B)	
VR502L/R	3248010343	10k Ω (B)	
Transistors			
Q101	2208206105	KTA1266Y PNP	
Q102	2208222105	DTA114Y PNP	
Q103	2208622106	DTC114Y NPN	
Q104	2208606113	KMPS A56 PNP	
Q105	2208222105	DTA114Y PNP	
Q106	2208622106	DTC114Y NPN	
Q107	2208206105	KTA1266Y PNP	
Q108	2208606112	KTD1302 NPN	
Q109	2208206105	KTA1266Y PNP	
Q201 - Q203	2208222105	DTA114Y PNP	
Q204 - Q206	2208606112	KTD1302 NPN	
Q207 - Q209	2208206105	KTA1266Y PNP	
Q210	2208622106	DTC114Y NPN	
Q213	2208206105	KTA1266Y PNP	
Q214/Q215	2208722100	2SA1515 PNP	
Q216 - Q218	2208622106	DTC114Y NPN	
Q219	2208722100	2SA1515 PNP	
Q220	2208606113	KMPS A56 PNP	
Q221 - Q223	2208622106	DTC114Y NPN	
Q224	2208206105	KTA1266Y PNP	
Q225	2208722100	2SA1515 PNP	
Q301	2208406117	KTC2236AY NPN	
Q302	2208606112	KTD1302 NPN	
Q303	2208606114	KMPS A06 NPN	
Q304 - Q306	2208622106	DTC114Y NPN	
Q307	2208606114	KMPS A06 NPN	
Q401L/R	2208606112	KTD1302 NPN	
Q402L/R	2208606112	KTD1302 NPN	
Q403L/R-Q414L/R	2208622108	DTC114T NPN	
Q415L/R	2208606112	KTD1302 NPN	
Q501L/R	2208622108	DTC114T NPN	
Q502	2208622108	DTC114T NPN	
Q506L/R	2208622106	DTC114Y NPN	
Q507/Q508	2208622108	DTC114T NPN	
Q509L/R	2208622106	DTC114Y NPN	

Ref.No	Part No.	Description	Remark
Q510L/R	2208622106	DTC114Y NPN	
Q511 - Q515	2208606114	KMPS A06 NPN	
Q601	2208206105	KTA1266Y PNP	
Q602/Q603	2208622108	DTC114T NPN	
Q604	2208206105	KTA1266Y PNP	
Others			
RLY501	5528001020	RY - 12W - K	
Resonator	3938101880	4.19MHz	
.	4235007210	Terminal Ground	

Ref.No	Part No.	Description	Remark
Dolby P. C. Board			
Capacitors			
C701L/R	3479247971	Electric SA 4.7uF 50V M	
C702L/R	3479247971	Electric SA 4.7uF 50V M	
C703 - C704	3479322121	Electric SG 220uF 10V M	
C705L/R	3479247971	Electric SA 4.7uF 50V M	
C706	3479322061	Electric SG 22uF 50V M	
C707	3479333061	Electric SG 33uF 35V M	
C708L/R	3679392120	Mylar 0.0039uF 100V J	
C709L/R	3679222120	Mylar 0.0022uF 100V J	
C710L/R	3679222120	Mylar 0.0022uF 100V J	
C711L/R	3679102120	Mylar 0.001uF 100V J	
C712L/R	3679102120	Mylar 0.001uF 100V J	
C713L/R	3479233971	Electric SA 3.3uF 50V M	
C714L/R	3679222120	Mylar 0.0022uF 100V J	
C715L/R	3519104935	Ceramic 0.1uF 50V K	
C716L/R	3519104935	Ceramic 0.1uF 50V K	
C717L/R	3479247971	Electric SA 4.7uF 50V M	
C718L/R	3479347041	Electric SG 47uF 25V M	
C719/C720	3479333061	Electric SG 33uF 35V M	
C721L/R	3579103530	Ceramic 0.01uF 50V K	
C722	3519104935	Ceramic 0.1uF 50V K	
C723	3479233871	Electric SA 0.33uF 50V M	
C724	3519104935	Ceramic 0.1uF 50V K	
C725L/R	3579103530	Ceramic 0.01uF 50V K	
C726	3479268871	Electric SA 0.68uF 50V M	
C727	3479233871	Electric SA 0.33uF 50V M	
C728/C729	3479210971	Electric SA 1uF 50V M	
C730	3519104935	Ceramic 0.1uF 50V K	
C731	3479347041	Electric SG 47uF 25V M	
Connectors			
ONT401/ONT402	4428560120	Board to Board Plug 12P	
Coils			
L701L/R	2658311020	MPX Filter, 105KHz	
Diodes			
D701 - C703	2058322101	1N4148M	
IC's			
IC701	2168011134	HA12170NT, Dolby B/C NR	
IC702	2168206103	KIA4559, Headphone	
IC703	2168027201	BA335, Blank Skip	
IC704	2168022101	BA336, AMS	

Ref.No	Part No.	Description	Remark
Resistors			
R701L/R	3069682970	6.8kΩ	Dom.
R702L/R	3069302970	3kΩ	
R703L/R	3069223970	22kΩ	
R704	3069183970	18kΩ	
R705L/R	3069242970	2.4kΩ	
R706L/R	3069682970	6.8kΩ	
R707L/R	3069561970	560Ω	
R708L/R	3069102970	1kΩ	
R709	3069243970	24kΩ	
R710	3069223970	22kΩ	
R711	3069103970	10Ω	
R712	3069302970	3kΩ	
R713	3069473970	47kΩ	
R714L/R	3069333970	33kΩ	
R715L/R	3069103970	10kΩ	
R715L/R	3069562970	5.6kΩ	
R716L/R	3069752970	7.5kΩ	
R717L/R	3069473970	47kΩ	
R718L/R	3069103970	10kΩ	
R719L/R	3069100970	10Ω	
R720	3069103970	10kΩ	
R721L/R	3069473970	47kΩ	
R722	3069103970	10kΩ	
R723	3069224970	220kΩ	
R724	3069183970	18kΩ	
R725	3069681970	680Ω	
R726L/R	3069473970	47kΩ	
R727	3069682970	6.8kΩ	
R728/R729	3069103970	10kΩ	
R730	3069394970	390kΩ	
R731	3069274970	270kΩ	
R732	3069103970	10kΩ	
Variable Resistors			
VR701L/R	3069020343	20kΩ(B)	
Transistors			
Q701L/R	2208622106	DTC114Y NPN	
Q702L/R	2208622106	DTC114Y NPN	
Q703	2208206105	KTA1266Y PNP	
Q704/Q705	2208622106	DTC114Y NPN	

Ref.No.	Part No.	Description	Remark
MIC P. C. Board			
Capacitors			
C801L/R	3479247971	Electric SA 4.7uF 50V M	
C802L/R	3479247971	Electric SA 4.7uF 50V M	
C803	3479333061	Electric SG 33uF 35V M	
C804	3479333061	Electric SG 33uF 35V M	
C805	3519104935	Ceramic 0.1uF 50V K	
C806	.	Not used !	
C807L/R	3579221130	Ceramic 220pF 50V J	
Connectors			
SLT503	4119213204	Wire Flat 13P 200mm to Main Board	

Ref.No	Part No.	Description	Remark
IC			
IC801	2168206103	KIA4559, MIC	
Resistors			
R801	3069240970	24 Ω	Dom
R802L/R	3069104970	100k Ω	
R802L/R	3069563970	56k Ω	
R803L/R	3069102970	1 Ω	
R803L/R	3069621970	620 Ω	
R804L/R	3069104970	100k Ω	
R805L/R	3069102970	1k Ω	
R806L/R	3069473970	47k Ω	
R807	3069472970	4.7k Ω	

Ref.No	Part No.	Description	Remark
Display P.C. Board			
Capacitors			
C901L/R	3519104935	Ceramic 0.1uF 50V K	
C902L/R	3479210041	Electric SA 10uF 25V M	
C903L/R	3479247941	Electric SA 4.7uF 25V M	
Connectors			
SLT204	4119208184	Wire Flat 8P 180mm to Main B'D	
SLT502	4119209264	Wire Flat 9P 260mm to Main B'D	
LED's			
D901	2371124501	SLR - 34 - YCD, Memory	
D902	2371124501	SLR - 34 - YCD, Dolby B	
D903	2371124501	SLR - 34 - YCD, Dolby C	
D904	2371124501	SLR - 34 - YCD, Blank Skip	
D905	2371124501	SLR - 34 - YCD, Nor - Dubbing	
D906	2371124501	SLR - 34 - YCD, Hi - dubbing	
D907	2371124501	SLR - 34 - YCD, R.Play, A Deck	
D908	2371124501	SLR - 34 - YCD, F.Play, A Deck	
D909	2371124501	SLR - 34 - YCD, Relay Play	
D910	2371124501	SLR - 34 - YCD, R.Play, B Deck	
D911	2371124501	SLR - 34 - YCD, F.Play, B Deck	
D912/D913	2371124501	SLR - 34 - YCD, Power On	
D914L/R	2371124501	SLR - 34 - YCD, - 10dB	
D915L/R	2371124501	SLR - 34 - YCD, - 6dB	
D916L/R	2371124501	SLR - 34 - YCD, - 3dB	
D917L/R	2371124701	SLR - 34 - URC, 0dB	
D918L/R	2371124701	SLR - 34 - URC, + 3dB	
D919L/R	2371124701	SLR - 34 - URC, + 6dB	
D920	2371124701	SLR - 34 - URC, Rec	

Resistors			
R901L/R	3069333970	33k Ω	1.5k Ω
R902L/R	3069682970	6.8k Ω	
R903L/R	3069202970	2k Ω	
R904L/R	3069622970	8.2k Ω	
R905L/R	3069103970	10 Ω	
R906	3069331970	330 Ω	
R907L	R909L/R	3069152970	
R909L/R			
R910	3069101970	100 Ω	
R911	3069271970	270 Ω	
R912 - R919	3069680970	68 Ω	
R920	3069681970	680 Ω	
Transistor			
C901L/R	2208606104	KTC1815Y	

Ref.No.	Part No.	Description	Remark
Switch P.C. Board			
Connector			
SLT206	4119211204	Slat wire 11P	

Ref.No.	Part No.	Description	Remark
Mode P.C. Board			
Connector			
SLT201	4119205264	Wire Flat 5P 260mm to Main Board	
Diodes			
D001/D002	2058322101	1N4148M	

Ref.No.	Part No.	Description	Remark
Headphone P.C. Board			
Capacitors			
C1001 - C1003	3519104935	Ceramic 0.1uF 50V K	
Connector			
SLT301	4119203404	Wire Flat 3P 400mm to Main Board	

Ref.No.	Part No.	Description	Remark
Power Switch P. C. Board			
Connector			
SLT102	4119206284	Wire Flat 6P 280mm to Main Board	

Ref.No.	Part No.	Description	Remark
Power P.C. Board			
Connector			
CNT01	4428525790	Plug 3P	
Fuses			
F01	5508302034	T1A 250V	C,D,F,K,L,S,G,E
(F01)	5508301434	T315mA 250V	B
(F01)	5508201330	NB300mA 250V	Dom.
F02	5508301734	T630mA 250V	B
(F02)	5508201830	NB750mA 250V	Dom.
Others			
•	4255001010	Clip Fuse	
•	2828087307	Transformer 120V/60Hz	A
•	2828087407	Transformer 120V/60Hz 220V/50Hz	B
•	2828082007	Transformer 230V 50Hz	C,D,F,S,G,E
•	2828089907	Transformer 240V 50Hz	E
•	2828092007	Transformer 220V 50Hz	K,L,E
•	2828089807	Transformer 110V/220V 60Hz	Dom.

Mechanical Parts List

No.	Description	Part No.	Q'ty	Remark
1	Panel Front, Black	048501022411	1	
1	Panel Front, Black	048501022412	1	DOM.
2	Badge, Sherwood	048535031911	1	
2	Badge	048535032511	1	DOM.
3	Button Power, Black	8545074310	1	
4	Spring Button	6555004380	1	
5	Label Silver	9057079250	2	
6	Cassette Case	8562002310	2	
7	Door Deck, A	048563005711	1	
8	Window Door	048555037511	2	
9	Spring Door, A	6555011010	1	
10	Spring Door, B	6555011020	1	
11	Diffuser LED	8535036110	1	
12	Inlay LED	048535034710	1	
13	Window LED	048555037410	1	
14	Door Deck, B	048563005712	1	
15	Button Main, A, Black	048543041711	1	
16	Button Main, A, Black	048543041721	1	
17	Knob Phone, Black	048545076011	2	
18	Knob MIC	048545085811	1	DOM.
19	Knob Slide	8542084520	2	
20	Switch Slide	4618006710	2	
21	Jack Phones, 3P	4438005010	1	
22	Bracket Phone	6505092310	1	
23	Counter Tape	5318003310	1	
24	Belt	7165000610	1	
25	Bracket Counter	6105116110	1	
26	Holder LED	6513005210	1	
27	Button Push	8545092110	2	
28	Switch Push	4618058810	1	
29	Switch Tact	4658003710	18	
30	Hinge Case, B	6515012820	1	
31	Button Eject	8543041910	2	
32	Spring Eject	6555607310	2	
33	Mecha Deck, A	5708012510	1	
34	Air Damper	6308001510	2	
35	Bracket Damper, A	6105115910	1	
36	Bracket Mechanism	6103022410	1	
37	Locker Eject, A	7143103910	1	
38	Spring Locker, A	6555802310	1	
39	VR Level, 100KX2	3208062610	1	
40	VR Balance, 100KSW	3208062010	1	
41	VR MIC, 10KX1	3208059510	1	DOM.
42	Jack Phones, 9P	4438005210	1	
43	Bracket VR	6105116210	1	
44	Center Ring	6515013010	1	DOM.
45	Nut M9	.	3	
46	Nut M12	.	1	
47	Mechanism Deck, B	5708012610	1	
48	Bracket Damper, B	6105116010	1	
49	Hinge Case, A	6515012810	1	
50	Bracket Mechanism	6103022410	1	
51	Locker Eject, B	7143103920	1	
52	Spring Locker, B	6555802320	1	
53	Cover Top, Black	046122020311	1	
54	Frame Side, L	6122632810	1	
55	AC Out Let, Black	4448103910	1	DOM.
56	AC Out Let, Black	4448103610	1	C,D,F
56	AC Out Let, Black	4448103210	1	A,B
57	AC Power Socket, Black	4448003510	1	DOM.,A,B
58	AC Power Socket, Black	4448003310	1	C,D,E,F
58	Switch Power	4628035210	1	

No.	Description	Part No.	Q'ty	Remark
59	Rubber	6715016230	1	
60	Voltage Selector	4618006610	1	DOM.,B
61	Heatsink	7505206120	1	
62	Heatsink Regulator TR	7505202410	3	
63	Jack RCA, Digi	4438105010	1	
64	Jack RCA, 4P	4438103110	1	
65	Bracket P.C.Board	6505116310	1	
66	Frame Side, R	6123620120	1	
67	Cover Bottom	6122416040	1	
68	Foot, Hot Stamping, Gold	046033101611	4	
69	Power Transformer	2828087307	1	A
69	Power Transformer	2828087407	1	B
69	Power Transformer	2828082007	1	C,D,F,SGE
69	Power Transformer	2828089907	1	E
69	Power Transformer	2828092007	1	KLE
69	Power Transformer	2828089807	1	DOM.
70	Nut M4X.Y	8209540011	2	
71	Back Chassis, Black	6102032410	1	
72	Ground Terminal	4408104910	1	DOM.
73	AC Cord Set, Black	4308001810	1	DOM.
73	AC Cord Set, Black	4308005710	1	A,B
73	AC Cord Set, Black	4308006610	1	A,C,F
73	AC Cord Set, Black	4308006010	1	F
74	AC Adapter, Black	4428300310	1	DOM.
75	Shield Plate	6165142110	1	
76	Bracket Trans	6505124910	1	

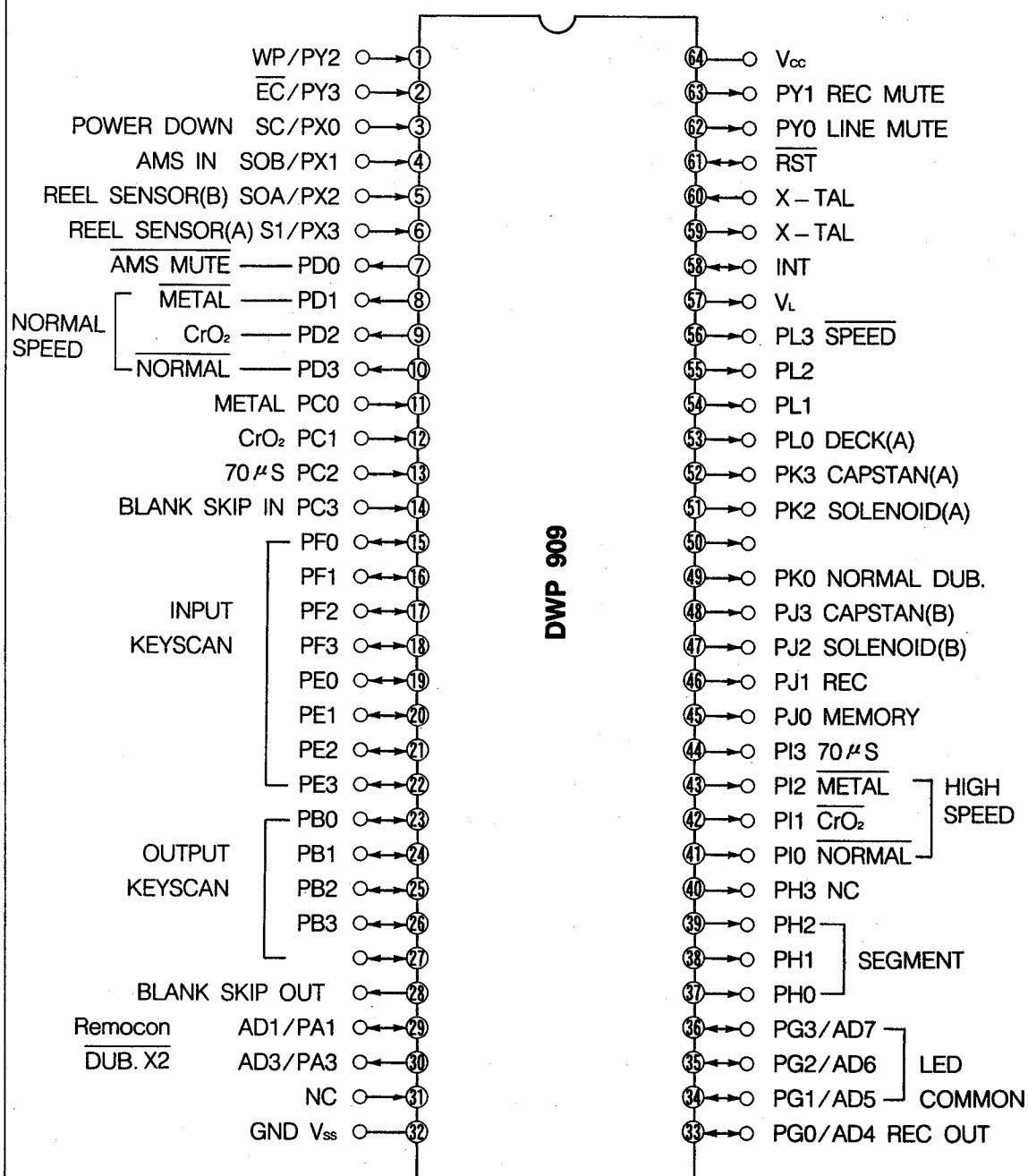
Screws

No.	Description	Part No.	Q'ty	Remark
S1	#2 WPTC 3X8 ZNY	8159230081	10	
S2	#2 BTC 3X8 ZNB	8109230083	14	
S3	#2 BTC 3X8 ZNY	8109230081	33	
S4	Shoulder	8095003310	4	
S5	SAM 3X4 ZNY	8109420041	4	
S6	#2 PTC 3X8 ZNB	8109230083	1	
S7	WSAM 4X8 ZNB	8119440083	4	
S8	#2 PTC 4X6 ZNY	8119240061	3	
W1	Washer	8309030011	2	

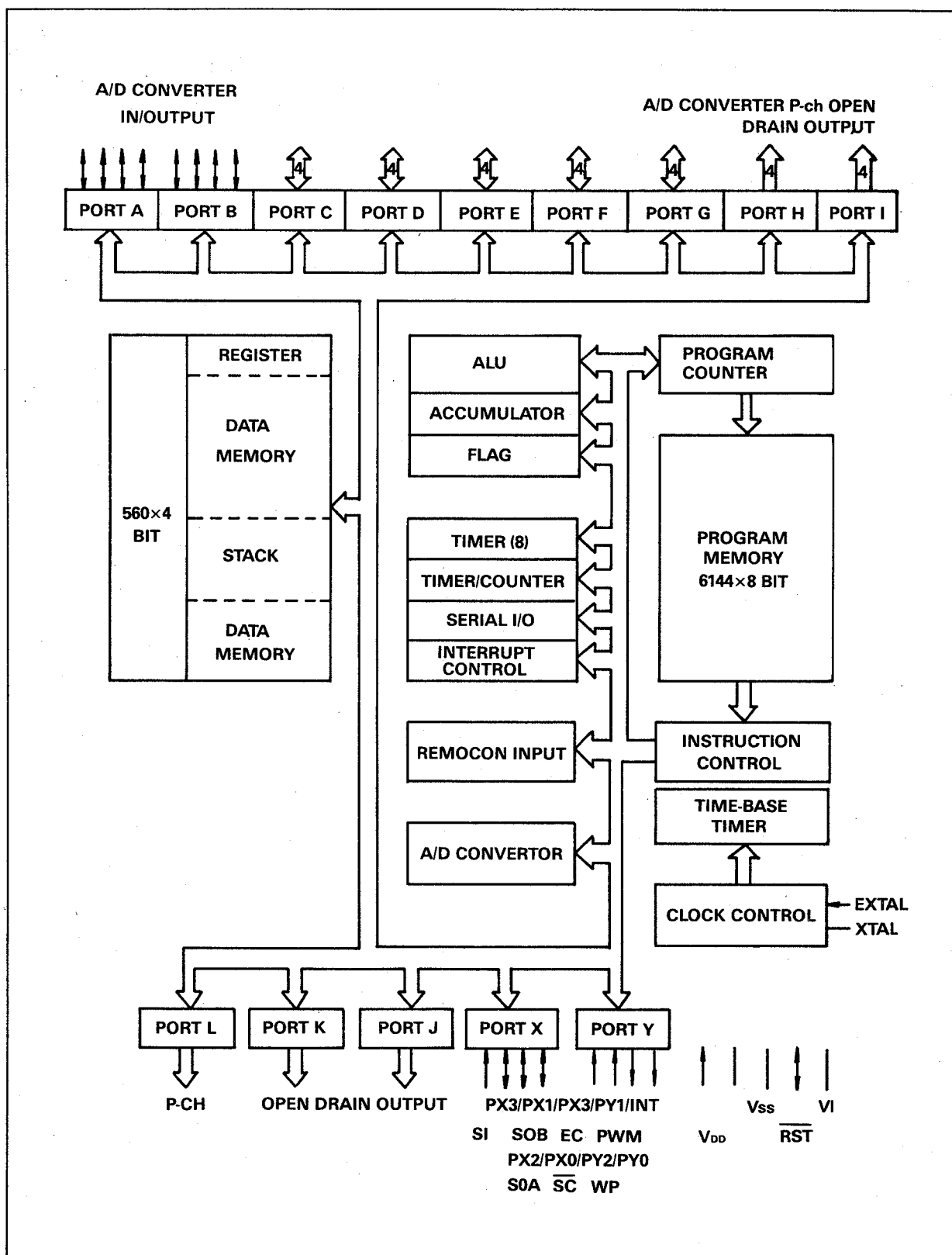
IC Lead Identification and Internal Diagram

DWP909 : IC201

Equivalent Circuit

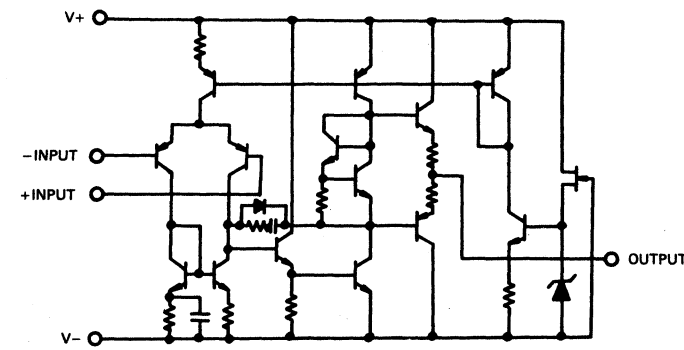


CPU BLOCK DIAGRAM

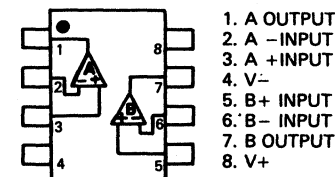


NJM2068 — (PB AMP) : IC501, IC503

Equivalent Circuit

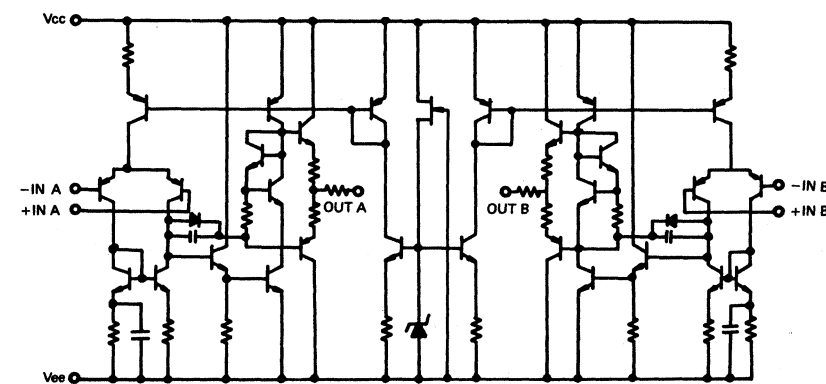


(TOP VIEW)

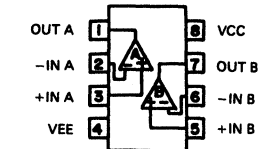


KIA4559S (6559) — REC AMP, PHONES, MIC AMP. : 401, IC702, IC801

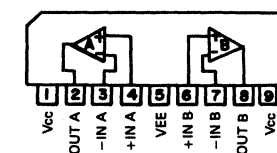
Equivalent Circuit



KIA 4559P, KIA 4559F

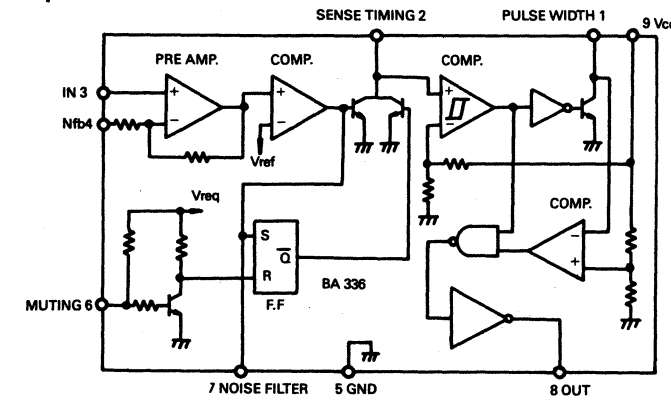


KIA 4559S

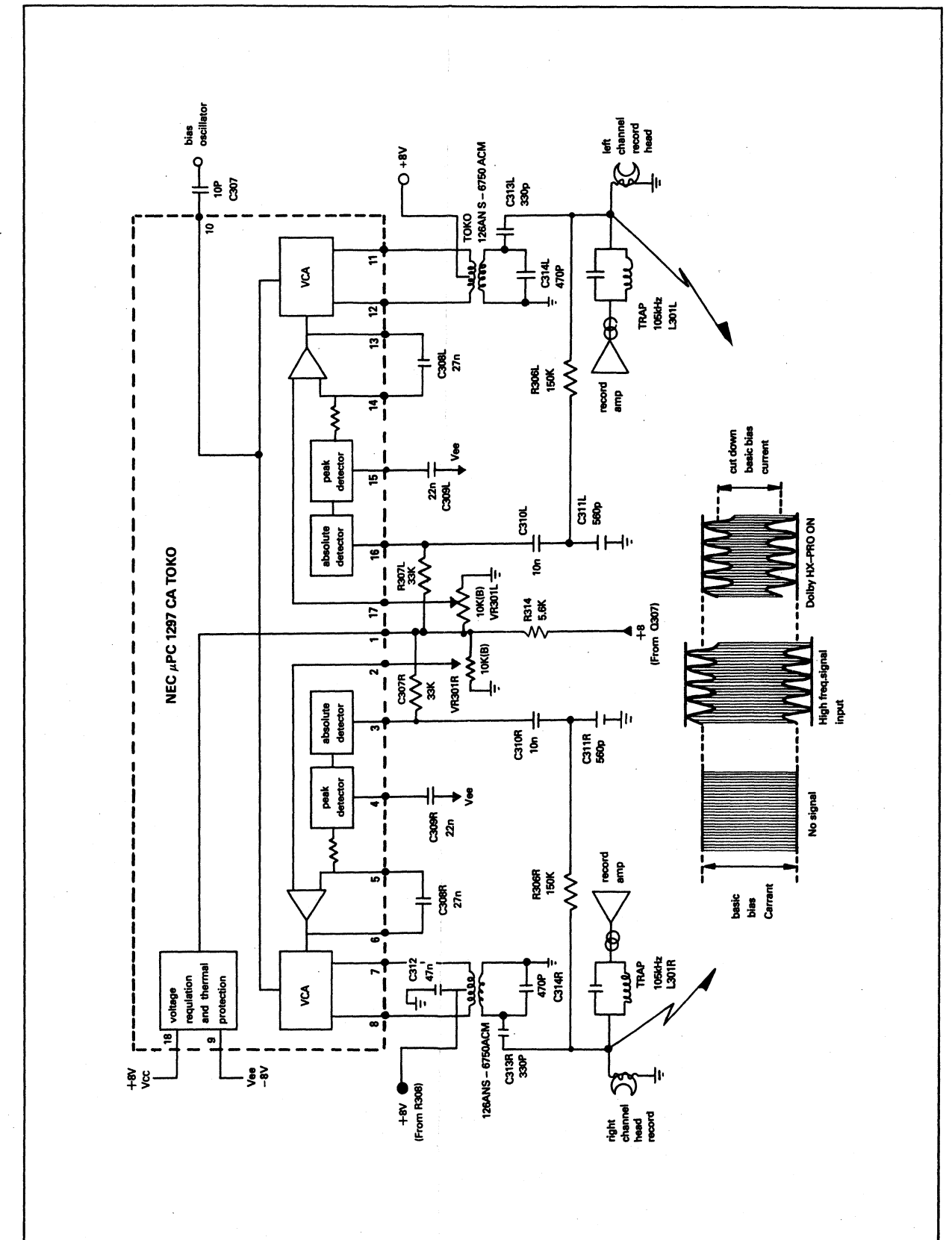


BA336 (AMS IC) : IC704

Equivalent Circuit

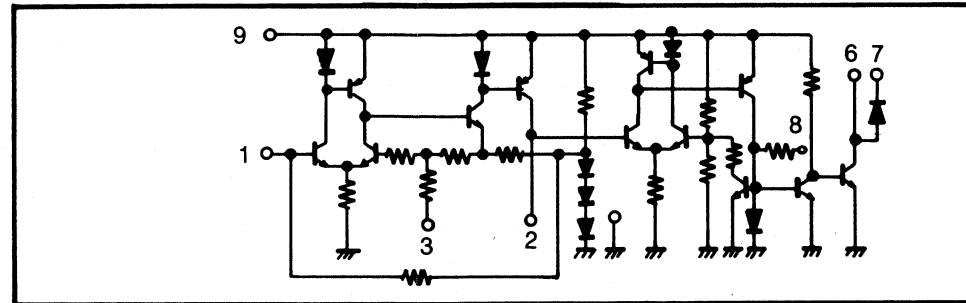


PC 1297 CA : IC301

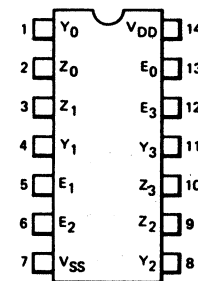
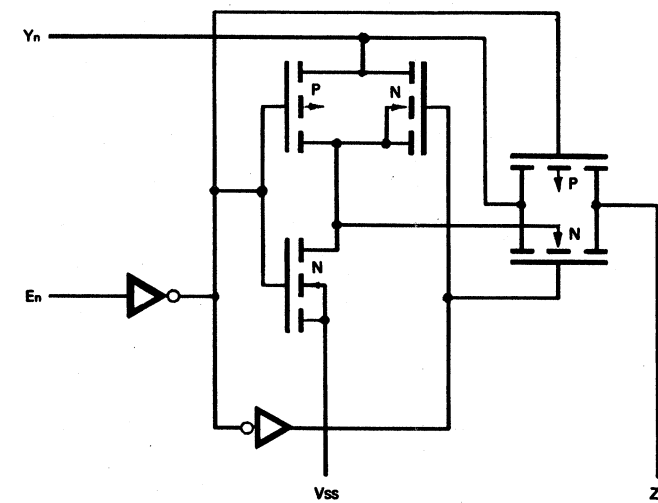


BA335 (BLANK SKIP) : IC703

Equivalent Circuit



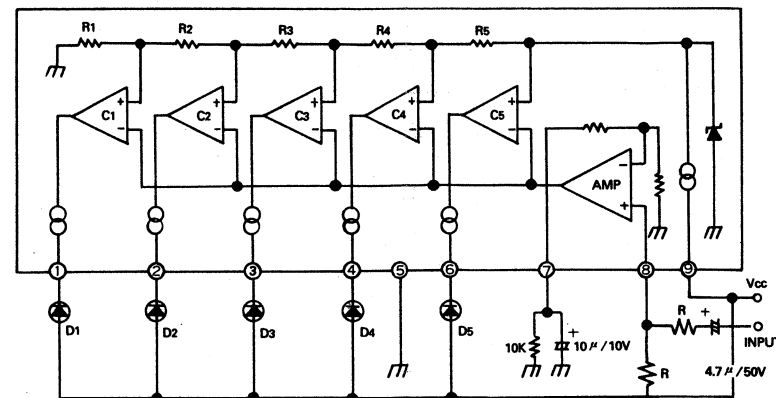
GD4066B (A & B DECKS SW) : IC502,IC602



NOTE
The SO Package has the same pinouts (Connection Diagram) as the Dual In-line Package.

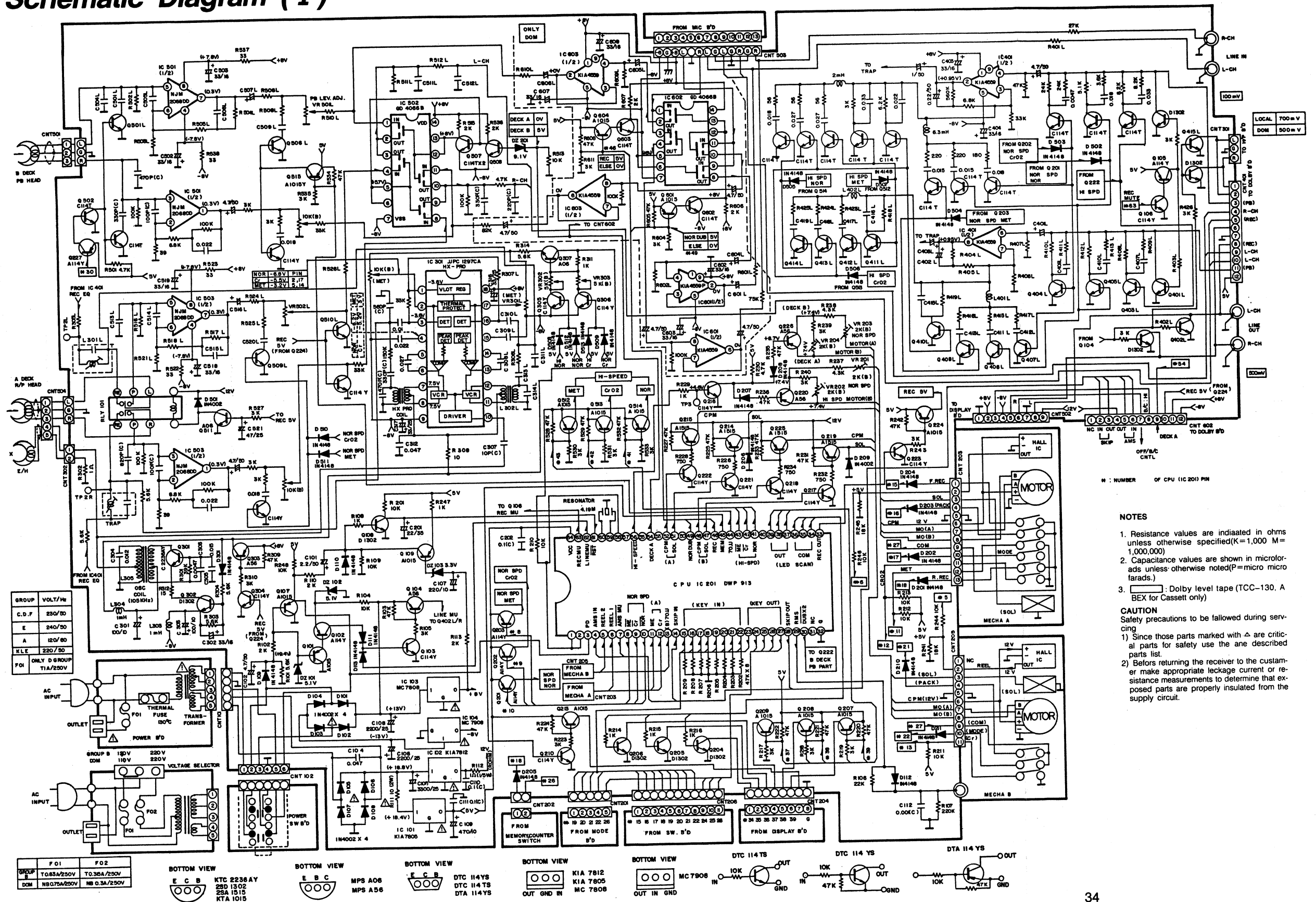
KA2284 (LED DRIVER : IC901L / R)

Equivalent Circuit



Note:

Schematic Diagram (I)



NOTES

1. Resistance values are indicated in ohms unless otherwise specified (K=1,000 M=1,000,000)
2. Capacitance values are shown in microfarads unless otherwise noted (P=micro farads.)
3. :Dolby level tape (TCC-130, A BEX for Cassett only)

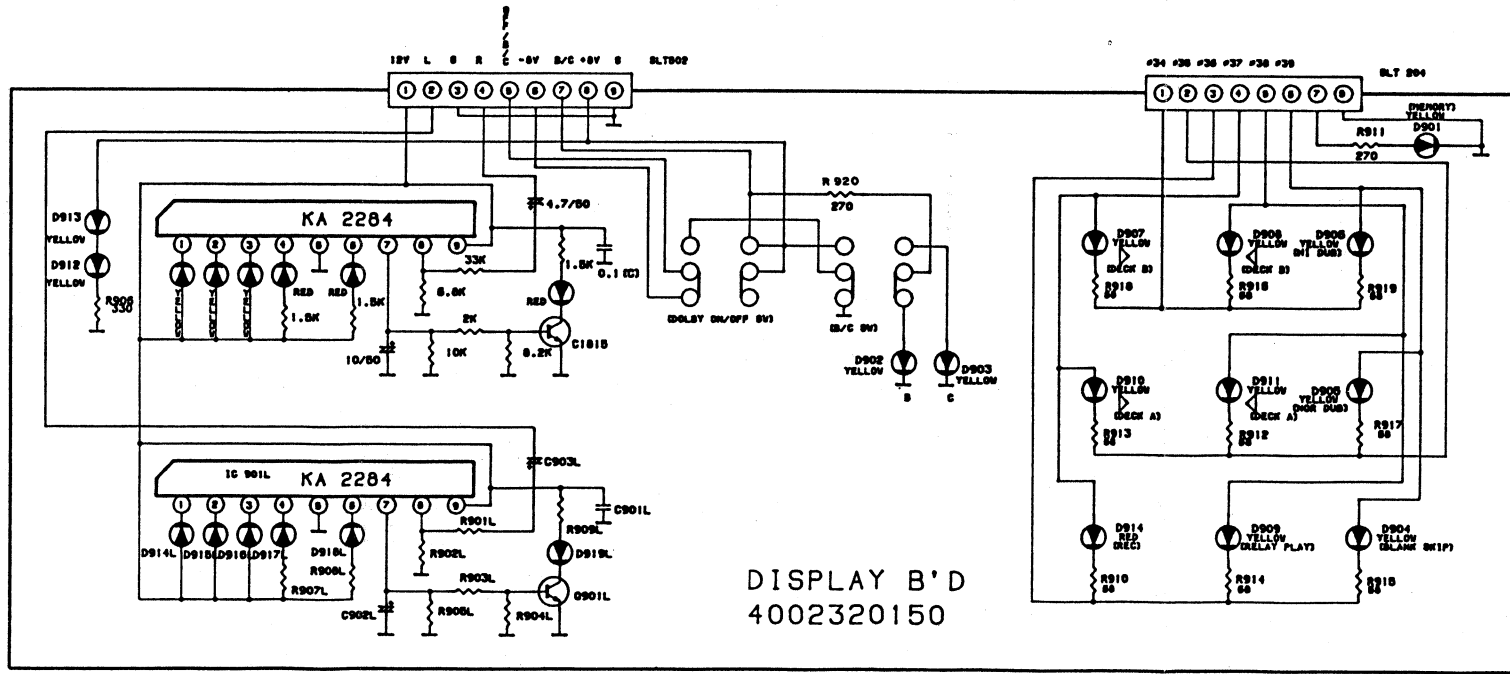
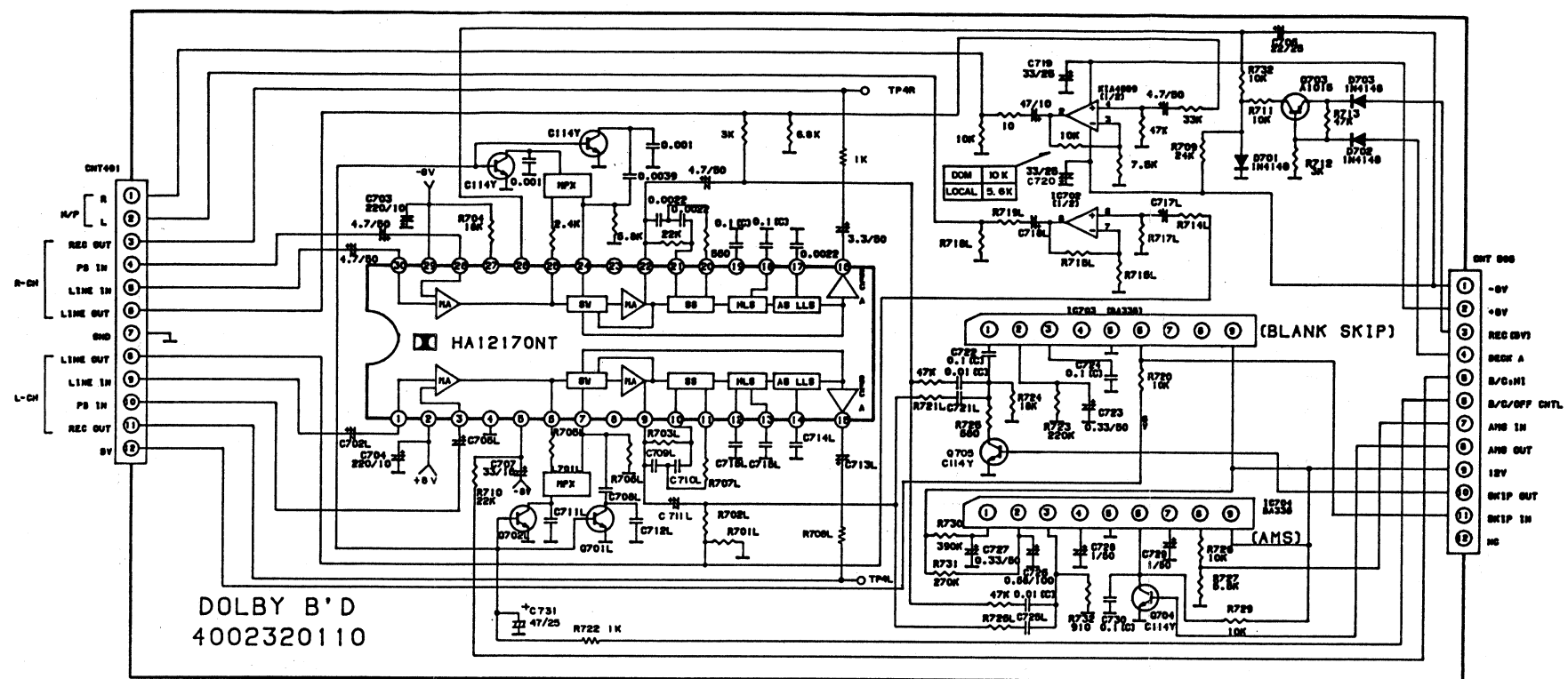
CAUTION

CAUTION
Safety precautions to be followed during servicing

- 1) Since those parts marked with Δ are critical parts for safety use the one described parts list.
- 2) Before returning the receiver to the customer make appropriate leakage current or resistance measurements to determine that exposed parts are properly insulated from the supply circuit.

Schematic Diagram (II)

Model No. : DD - 3010C



*NOTE : * IS THE CPU PIN NUMBER.

